

APPENDIX A

PROPOSED SUGGESTED CONTROL MEASURE

Note: Appendix A contains two versions of the proposed Suggested Control Measure (SCM). The text of each version is identical; only the formatting is different.

The first version is a “clean copy” of the currently proposed SCM, with no underlines or strikeouts. The second version displays the differences between the text of the currently proposed SCM, and the text of the proposed SCM (dated 6/10/99) that was contained in Appendix C to the June 11, 1999, “Notice of Preparation and Initial Study”. Text that has been added to the 6/10/99 SCM is shown in underline, and text that has been deleted is shown in ~~strikeout~~.

For those individuals who may be interested, a third version of the SCM is available on the ARB’s Internet site at <http://www.arb.ca.gov/arch/arch/recent.htm>. The text of the third version is the same as the two versions described above, but the third version has been formatted to display the differences between the currently proposed SCM, and the text of the proposed SCM that is dated 12/1/99, and was made available for discussion purposes in connection with the December 14, 1999, public workshop. Text that has been added to the 12/1/99 SCM is shown in underline, and text that has been deleted is shown in ~~strikeout~~.

PROPOSED SUGGESTED CONTROL MEASURE (2/11/00)

**California Air Resources Board (ARB)
Suggested Control Measure for Architectural Coatings**

RULE ____ ARCHITECTURAL COATINGS

1. APPLICABILITY

- 1.1 Except as provided in subsection 1.2, this rule is applicable to any person who supplies, sells, offers for sale, or manufactures any architectural coating for use within the District, as well as any person who applies or solicits the application of any architectural coating within the District.
- 1.2 This rule does not apply to:
 - 1.2.1 Any architectural coating that is manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.
 - 1.2.2 Any aerosol coating product.
 - 1.2.3 Any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less.

2. DEFINITIONS

- 2.0 Adhesive: Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.
- 2.1 Aerosol Coating Product: A pressurized coating product containing pigments or resins that dispenses product ingredients by means of a propellant, and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marketing applications.
- 2.2 Antenna Coating: A coating labeled as and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.
- 2.3 Antifouling Coating: A coating labeled as and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136, *et seq.*) and with the California Department of Pesticide Regulation.

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- 2.4 Appurtenance: Any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.
- 2.5 Architectural Coating: A coating to be applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purposes of this rule.
- 2.6 Bitumens: Black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.
- 2.7 Bituminous Roof Coating: A coating labeled as and formulated for roofing that incorporates bitumens.
- 2.8 Bond Breaker: A coating labeled as and formulated for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.
- 2.9 Clear Brushing Lacquers: Clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush, and which are labeled as specified in subsection 4.1.5.
- 2.10 Clear Wood Coatings: Clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent solid film.
- 2.11 Coating: A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.
- 2.12 Colorant: A concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in sale units to produce the desired color.
- 2.13 Concrete Curing Compound: A coating labeled as and formulated for application to freshly poured concrete to retard the evaporation of water.

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- 2.14 Dry Fog Coating: A coating labeled as and formulated only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.
- 2.15 Exempt Compound: A compound identified as exempt under the definition of Volatile Organic Compound (VOC), subsection 2.57. Exempt compounds content of a coating shall be determined by U.S. EPA Method 24 or South Coast Air Quality Management District (SCAQMD) Method 303-91 (Revised February 1993), incorporated by reference in subsection 6.5.10.
- 2.16 Faux Finishing Coating: A coating labeled and formulated as a stain or glaze to create artistic effects including, but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain.
- 2.17 Fire-Resistive Coating: An opaque coating labeled as and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements. The fire-resistive coating and the testing agency must be approved by building code officials. The fire-resistant coating shall be tested in accordance with ASTM Designation E 119-98, incorporated by reference in subsection 6.5.2.
- 2.18 Fire-Retardant Coating: A coating labeled as and formulated to retard ignition and flame spread, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state and local building code requirements. The fire-retardant coating and the testing agency must be approved by building code officials. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-99, incorporated by reference in subsection 6.5.1.
- 2.19 Flat Coating: A coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in subsection 6.5.3.
- 2.20 Floor Coating: An opaque coating that is labeled as and formulated for application to flooring including, but not limited to, decks, porches, steps, and other horizontal surfaces which may be subject to foot traffic, for the purposes of abrasion resistance.
- 2.21 Flow Coating: A coating that is used by electric power companies or their subcontractors exclusively to maintain the protective coating systems present on utility transformer units.

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- 2.22 Form-Release Compound: A coating labeled as and formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.
- 2.23 Graphic Arts Coating or Sign Paint: A coating labeled as and formulated for hand-application by artists using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals including lettering enamels, poster colors, copy blockers, and bulletin enamels.
- 2.24 High-Temperature Coating: A high performance coating labeled as and formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).
- 2.25 Industrial Maintenance Coating: A high performance architectural coating, excluding floor coatings but including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated for application to substrates exposed to one or more of the following extreme environmental conditions listed in subsections 2.25.1 through 2.25.5, and labeled as specified in subsection 4.1.4:
 - 2.25.1 Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
 - 2.25.2 Acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
 - 2.25.3 Repeated exposure to temperatures above 121°C (250°F);
 - 2.25.4 Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or
 - 2.25.5 Exterior exposure of metal structures and structural components.
- 2.26 Lacquer: A clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film. Lacquer stains are considered stains, not lacquers.
- 2.27 Low Solids Coating: A coating containing 0.12 kilogram or less of solids per liter (1 pound or less of solids per gallon) of coating material.
- 2.28 Magnesite Cement Coating: A coating labeled as and formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.
- 2.29 Mastic Texture Coating: A coating labeled as and formulated to cover holes and minor cracks and to conceal surface irregularities, and is applied in a single coat of at least 10 mils (0.010 inch) dry film thickness.

- 2.30 Metallic Pigmented Coating: A coating containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon), when tested in accordance with SCAQMD Method 318-95, incorporated by reference in subsection 6.5.4.
- 2.31 Multi-Color Coating: A coating that is packaged in a single container and that exhibits more than one color when applied in a single coat.
- 2.32 Nonflat Coating: A coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter and 5 or greater on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in subsection 6.5.3.
- 2.33 Post-Consumer Coating: A finished coating that would have been disposed of as a solid waste, having completed its usefulness to a consumer, and does not include manufacturing wastes.
- 2.34 Pre-Treatment Wash Primer: A primer that contains a minimum of 0.5 percent acid, by weight, when tested in accordance with ASTM Designation D 1613-96, incorporated by reference in subsection 6.5.5, that is labeled as and formulated for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.
- 2.35 Primer: A coating labeled as and formulated for application to a substrate to provide a firm bond between the substrate and subsequent coats.
- 2.36 Quick-Dry Enamel: A nonflat coating that is labeled as and formulated to have the following characteristics:
 - 2.36.1 Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16 and 27°C (60 and 80°F);
 - 2.36.2 When tested in accordance with ASTM Designation D 1640-95, incorporated by reference in subsection 6.5.6, sets to touch in 2 hours or less, is tack free in 4 hours or less, and dries hard in 8 hours or less by the mechanical test method; and
 - 2.36.3 Has a dried film gloss of 70 or above on a 60 degree meter.
- 2.37 Quick-Dry Primer, Sealer, and Undercoater: A primer, sealer, or undercoater that is dry to the touch in 30 minutes and can be recoated in 2 hours when tested in accordance with ASTM Designation D 1640- 95, incorporated by reference in subsection 6.5.6.
- 2.38 Recycled Coating: An architectural coating formulated such that not less than 50 percent of the total weight consists of secondary and post-consumer coating, with not less than 10 percent of the total weight consisting of post-consumer

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coating.

- 2.39 Residence: Areas where people reside or lodge including, but not limited to, single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.
- 2.40 Roof Coating: A non-bituminous coating labeled as and formulated for application to exterior roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and reflecting ultraviolet radiation. Metallic pigmented roof coatings which qualify as metallic pigmented coatings shall not be considered to be in this category, but shall be considered to be in the metallic pigmented coatings category.
- 2.41 Rust Preventative Coating: A coating formulated exclusively for use in or on a residence to prevent the corrosion of metal surfaces and labeled as in subsection 4.1.6.
- 2.42 Sanding Sealer: A clear wood sealer labeled as and formulated for application to bare wood to seal the wood and to provide a coat that can be sanded to create a smooth surface for subsequent applications of coatings. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category.
- 2.43 Sealer: A coating labeled as and formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate, or to prevent harm to subsequent coatings by materials in the substrate.
- 2.44 Secondary Coating: A fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.
- 2.45 Shellac: A clear or opaque coating formulated solely with the resinous secretions of the lac beetle (*Laciffer lacca*), thinned with alcohol, and formulated to dry by evaporation without a chemical reaction.
- 2.46 Shop Application: Application of a coating to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).
- 2.47 Solicit: To require for use or to specify, by written or oral contract.
- 2.48 Specialty Primer: A coating labeled as specified in subsection 4.1.7 and that is formulated for application to a substrate to seal fire, smoke or water damage; to condition excessively chalky surfaces, or to block stains. An excessively chalky

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surface is one that is defined as having chalk rating of four or less as determined by ASTM Designation D 4214-98, incorporated by reference in subsection 6.5.7.

- 2.49 Stain: A wood coating labeled as and formulated to change the color of a surface but not conceal the grain pattern or texture, including lacquer stains.
- 2.50 Swimming Pool Coating: A coating labeled as and formulated to coat the interior of swimming pools and to resist swimming pool chemicals.
- 2.51 Swimming Pool Repair and Maintenance Coating: A rubber based coating labeled as and used over existing rubber based coatings for the repair and maintenance of swimming pools.
- 2.52 Temperature-Indicator Safety Coating: A coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).
- 2.53 Tint Base: An architectural coating to which colorant is added after packaging in sale units to produce a desired color.
- 2.54 Traffic Marking Coating: A coating labeled as and formulated for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways.
- 2.55 Undercoater: A coating labeled as and formulated to provide a smooth surface for subsequent coatings.
- 2.56 Varnish: A clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated to dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.
- 2.57 Volatile Organic Compound (VOC): Any volatile compound containing at least one atom of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, and excluding the following:
 - 2.57.1 methane;
 - methylene chloride (dichloromethane);
 - 1,1,1-trichloroethane (methyl chloroform);
 - trichlorofluoromethane (CFC-11);
 - dichlorodifluoromethane (CFC-12);
 - 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
 - 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114);
 - chloropentafluoroethane (CFC-115);
 - chlorodifluoromethane (HCFC-22);

1,1,1-trifluoro-2,2-dichloroethane (HCFC-123);
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
1,1-dichloro-1-fluoroethane (HCFC-141b);
1-chloro-1,1-difluoroethane (HCFC-142b);
trifluoromethane (HFC-23);
pentafluoroethane (HFC-125);
1,1,2,2-tetrafluoroethane (HFC-134);
1,1,1,2-tetrafluoroethane (HFC-134a);
1,1,1-trifluoroethane (HFC-143a);
1,1-difluoroethane (HFC-152a);
cyclic, branched, or linear completely methylated siloxanes;
the following classes of perfluorocarbons:
(A) cyclic, branched, or linear, completely fluorinated alkanes;
(B) cyclic, branched, or linear, completely fluorinated ethers with
no unsaturations;
(C) cyclic, branched, or linear, completely fluorinated tertiary
amines with no unsaturations; and
(D) sulfur-containing perfluorocarbons with no unsaturations and
with the sulfur bonds only to carbon and fluorine; and

2.57.2 the following low-reactive organic compounds which have been exempted by the
U.S. EPA:

acetone;
ethane;
parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl benzene);
perchloroethylene; and
methyl acetate.

2.58 VOC Content: The weight of VOC per volume of coating, calculated according
to the procedures specified in subsection 6.1.

2.59 Waterproofing Sealer: A coating labeled as and formulated for application to a
porous substrate for the primary purpose of preventing the penetration of water.

2.60 Wood Preservative: A coating labeled as and formulated to protect exposed
wood from decay or insect attack, that is registered with both the U.S. EPA
under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States
Code (U.S.C.) Section 136, *et seq.*) and with the California Department of
Pesticide Regulation.

3. STANDARDS

3.1 **VOC Content Limits:** Except as provided in subsections 3.2 and 3.3, no person
shall, within the District, manufacture, blend, or repackage for sale within the
district, supply, offer for sale, sell, apply, or solicit the application of any
architectural coating with a VOC content in excess of the corresponding limit

specified in Table 1, after the specified effective date in Table 1.

- 3.2 **Most Restrictive VOC Limit:** If anywhere on the container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Table 1, then the most restrictive VOC content limit shall apply. This provision does not apply to subsections 3.2.1 through 3.2.13.
- 3.2.1 Lacquer coatings (including lacquer sanding sealers but excluding lacquer stains).
- 3.2.2 Metallic pigmented coatings.
- 3.2.3 Shellacs.
- 3.2.4 Fire-retardant coatings.
- 3.2.5 Pretreatment wash primers that also meet the definition for industrial maintenance coatings are subject only to the VOC content limit in Table 1 for pretreatment wash primers.
- 3.2.6 Industrial maintenance coatings.
- 3.2.7 Low-solids coatings.
- 3.2.8 Wood preservatives.
- 3.2.9 High temperature coatings.
- 3.2.10 Temperature-Indicator Safety Coatings.
- 3.2.11 Antenna Coatings.
- 3.2.12 Antifouling Coatings.
- 3.2.13 Flow Coatings.
- 3.3 **Sell-Through of Coatings:** A coating manufactured prior to the effective date specified for that coating in Table 1 may be sold, supplied, or offered for sale for up to three years after the specified effective date. This subsection does not apply to any coating that does not display the date or date-code required by subsection 4.1.1.
- 3.4 **Painting Practices:** All architectural coating containers used to apply the

contents therein to a surface directly from the container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but are not limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use. "Not in use" includes, but is not limited to, any interruption, delay, completion of transfer of the contents, or termination of the application.

- 3.5 **Thinning:** No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in Table 1.
- 3.6 **Industrial Maintenance Coatings:** Any person who applies or solicits the application of any architectural coating within the District shall follow the manufacturer's recommendation regarding the application of industrial maintenance coatings as described in subsection 4.1.4. Effective January 1, 2004, no person who applies or solicits the application of any architectural coating shall apply an industrial maintenance coating in or on a residence as defined in subsection 2.39 or in or on areas of industrial, commercial, or institutional facilities not exposed to the extreme environmental conditions identified in subsection 2.25, such as office space and meeting rooms.
- 3.7 **Rust Preventative Coatings:** Effective January 1, 2004, no person shall apply or solicit the application of any rust preventative coating for industrial use.
- 3.8 **Coatings Not Listed in Table 1:** For any coating that does not meet any of the definitions for the specialty coatings categories listed in Table 1, the VOC content limit shall be determined by classifying the coating as a flat coating or a nonflat coating, based on its gloss, as defined in subsections 2.19 and 2.32, and the corresponding flat or nonflat VOC limit shall apply.

4. CONTAINER LABELING REQUIREMENTS

- 4.1 Each manufacturer of any architectural coating subject to this rule shall display the information listed in subsections 4.1.1 through 4.1.7 on the coating container or label in which the coating is sold or distributed.
 - 4.1.1 **Date Code:** The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container. If the manufacturer uses a date code for any coating, the manufacturer shall file an explanation of each code with the Executive Officer of the ARB.
 - 4.1.2 **Thinning Recommendations:** A statement of the manufacturer's

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recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.

- 4.1.3 **VOC Content:** Each container of any coating subject to this rule shall display either the maximum or the actual VOC content of the coating, as supplied, including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in subsection 6.2. The equations in subsection 6.1 shall be used to calculate VOC content.
- 4.1.4 **Industrial Maintenance Coatings:** In addition to the information specified in subsection 4.1.1, 4.1.2, and 4.1.3, each manufacturer of any industrial maintenance coating subject to this rule shall display on the label or lid of the container in which the coating is sold or distributed one or more of the descriptions listed in subsections 4.1.4.1 through 4.1.4.4.
- 4.1.4.1 "For industrial use only."
- 4.1.4.2 "For professional use only."
- 4.1.4.3 "Not for residential use" or "Not intended for residential use."
- 4.1.4.4 "This coating is intended for use under the following condition(s):" (Include each condition in subsections 4.1.5.4.1 through 4.1.5.4.5 that applies to the coating.)
- 4.1.4.4.1 Immersion in water, wastewater, or chemical solutions (aqueous and nonaqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
- 4.1.4.4.2 Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
- 4.1.4.4.3 Repeated exposure to temperatures above 121°C (250°F);
- 4.1.4.4.4 Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleaners, or scouring agents; or
- 4.1.4.4.5 Exterior exposure of metal structures and structural components.
- 4.1.5 **Clear Brushing Lacquers:** Effective January 1, 2003, each container of this category shall display explicit label instructions that the product is formulated for brush application only, and that thinning and/or spraying is not permitted.

- 4.1.6 **Rust Preventative Coatings:** Effective January 1, 2003, the labels of rust preventative coatings shall include the statement "For Metal Substrates Only" prominently displayed.
- 4.1.7 **Specialty Primers:** Effective January 1, 2003, the labels of all specialty primers shall prominently display one or more of the descriptions listed in subsection 4.1.7.1 through 4.1.7.5.
 - 4.1.7.1 "For blocking stains only."
 - 4.1.7.2 "For fire-damaged substrates only."
 - 4.1.7.3 "For smoke-damaged substrates only."
 - 4.1.7.4 "For water-damaged substrates only."
 - 4.1.7.5 "For excessively chalky substrates only."

5. REPORTING REQUIREMENTS

- 5.1 **Clear Brushing Lacquers:** Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.
- 5.2 **Rust Preventative Coatings:** Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.
- 5.3 **Specialty Primers:** Each manufacturer of specialty primers shall, on or before April 1 of each calendar year, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.
- 5.4 **Toxic Exempt Compounds:** For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year, report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year:
 - 5.4.1 the product brand name and a copy of the product label with legible usage instructions;
 - 5.4.2 the product category listed in Table 1 to which the coating belongs;
 - 5.4.3 the total sales in California during the calendar year to the nearest gallon;

5.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.

5.5 **Recycled Coatings:** Manufacturers of recycled coatings must submit a letter to the Executive Officer of the Air Resources Board certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in California during the preceding year.

6. COMPLIANCE PROVISIONS AND TEST METHODS

6.1 **Calculation of VOC Content:** For the purpose of determining compliance with the VOC content limits in Table 1, the VOC content of a coating shall be determined by using the procedures described in subsection 6.1.1 or 6.1.2, as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

6.1.1 With the exception of low solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds. Determine the VOC content using equation 1 as follows:

$$\text{VOC Content} = \frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})} \quad (1)$$

Where:

VOC content	=	grams of VOC per liter of coating
W_s	=	weight of volatiles, in grams
W_w	=	weight of water, in grams
W_{ec}	=	weight of exempt compounds, in grams
V_m	=	volume of coating, in liters
V_w	=	volume of water, in liters
V_{ec}	=	volume of exempt compounds, in liters

6.1.2 For low solids coatings, determine the VOC content in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds. Determine the VOC content using equation 2 as follows:

$$\text{VOC Content}_{ls} = \frac{(W_s - W_w - W_{ec})}{(V_m)} \quad (2)$$

Where:

VOC content _{l_s}	=	the VOC content of a low solids coating in grams of VOC per liter of coating
W _s	=	weight of volatiles, in grams
W _w	=	weight of water, in grams
W _{ec}	=	weight of exempt compounds, in grams
V _m	=	volume of coating, in liters

- 6.2 **VOC Content of Coatings:** To determine the physical properties of a coating in order to perform the calculations in subsection 6.1, the reference method for VOC content is U.S. EPA Method 24, incorporated by reference in subsection 6.5.11, except as provided in subsections 6.3 and 6.4. An alternative method to determine the VOC content of coatings is SCAQMD Method 304-91 (Revised February 1996), incorporated by reference in subsection 6.5.12. The exempt compounds content shall be determined by SCAQMD Method 303-91 (Revised August 1996), incorporated by reference in subsection 6.5.10. To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24, or an alternative method as provided in subsection 6.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved as specified in subsection 6.3. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct a Method 24 analysis.
- 6.3 **Alternative Test Methods:** Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with subsection 6.2, after review and approved in writing by the staffs of the District, the ARB, and the U.S. EPA, may also be used.
- 6.4 **Methacrylate Traffic Marking Coatings:** Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in subsection 6.5.13. This method has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.
- 6.5 **Test Methods:** For coatings subject to the provisions of this rule, the following test methods shall be used:
- 6.5.1 **Flame Spread Index:** The flame spread index of a fire-retardant

coating shall be determined by ASTM Designation E 84-99, "Standard Test Method for Surface Burning Characteristics of Building Materials," incorporated by reference in section 2, Fire-Retardant Coating.

- 6.5.2 **Fire Resistance Rating:** The fire resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials," incorporated by reference in section 2, Fire-Resistive Coating.
- 6.5.3 **Gloss Determination:** The gloss of a coating shall be determined by ASTM Designation D 523-89 (1999), "Standard Test Method for Specular Gloss," incorporated by reference in section 2, Flat Coating, Nonflat Coating, and Quick-Dry Enamel.
- 6.5.4 **Metal Content of Coatings:** The metallic content of a coating shall be determined by SCAQMD Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," incorporated by reference in section 2, Metallic Pigmented Coating.
- 6.5.5 **Acid Content of Coatings:** The acid content of a coating shall be determined by ASTM Designation D 1613-96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products," incorporated by reference in section 2, Pre-treatment Wash Primer.
- 6.5.6 **Drying Times:** The set-to-touch, dry-hard, dry-to-touch, and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640- 95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature," incorporated by reference in section 2, Quick-Dry Enamel and Quick-Dry Primer, Sealer, and Undercoater. The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640- 95.
- 6.5.7 **Surface Chalkiness:** The chalkiness of a surface shall be determined using ASTM Designation D 4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films," incorporated by reference in section 2, Specialty Primer.
- 6.5.8 **Exempt Compounds--Siloxanes:** Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with section 6 by BAAQMD

Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," BAAQMD Manual of Procedures, Volume III, adopted 11/6/96, incorporated by reference in section 2, Volatile Organic Compound, and subsection 6.2.

- 6.5.9 **Exempt Compounds--Parachlorobenzotrifluoride (PCBTF):** The exempt compound parachlorobenzotrifluoride, shall be analyzed as an exempt compound for compliance with section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials Containing Parachlorobenzotrifluoride," BAAQMD Manual of Procedures, Volume III, adopted 12/20/95, incorporated by reference in section 2, Volatile Organic Compound, and subsection 6.2.
- 6.5.10 **Exempt Compounds:** Exempt compounds content under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1993), "Determination of Exempt Compounds," SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," incorporated by reference in section 2, Volatile Organic Compound, and subsection 6.2.
- 6.5.11 **VOC Content of Coatings:** The VOC content of a coating is determined by U.S. EPA Method 24 as it exists in appendix A of 40 Code of Federal Regulations (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings," 1998, incorporated by reference in subsection 6.2.
- 6.5.12 **Alternative VOC Content of Coatings:** The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," incorporated by reference in subsection 6.2.
- 6.5.13 **Methacrylate Traffic Marking Coatings:** The VOC content of methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings," (September 11, 1998), incorporated by reference in subsection 6.2.

Table 1
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS

Limits are expressed in grams of VOC per liter^a of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases. "Manufacturer's maximum recommendation" means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

Coating Category	Effective 1/1/2003	Effective 1/1/2004
Flat Coatings	100	
Nonflat Coatings	150	
Specialty Coatings		
Antenna Coatings	530	
Antifouling Coatings	400	
Bituminous Roof Coatings	250	
Bond Breakers	350	
Clear Wood Coatings <ul style="list-style-type: none">• Clear Brushing Lacquers• Lacquers (including lacquer sanding sealers)• Sanding Sealers (other than lacquer sanding sealers)• Varnishes	680 550 350 350	
Concrete Curing Compounds	350	
Dry Fog Coatings	400	
Faux Finishing Coatings	350	
Fire Resistive Coatings	350	
Fire-Retardant Coatings: <ul style="list-style-type: none">• Clear• Opaque	650 350	
Floor Coatings	100	
Flow Coatings	420	
Form-Release Compounds	250	
Graphic Arts Coatings (Sign Paints)	500	
High Temperature Coatings	420	

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Coating Category	Effective 1/1/2003	Effective 1/1/2004
Industrial Maintenance Coatings		250
Low Solids Coatings ^b	120	
Magnesite Cement Coatings	450	
Mastic Texture Coatings	300	
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Pre-Treatment Wash Primers	420	
Primers, Sealers, and Undercoaters	200	
Quick-Dry Enamels	250	
Quick-Dry Primers, Sealers, and Undercoaters	200	
Recycled Coatings	250	
Roof Coatings	250	
Rust Preventative Coatings	400	
Shellacs:		
• Clear	730	
• Opaque	550	
Specialty Primers	350	
Stains	250	
Swimming Pool Coatings	340	
Swimming Pool Repair and Maintenance Coatings	340	
Temperature-Indicator Safety Coatings	550	
Traffic Marking Coatings	150	
Waterproofing Sealers	250	
Wood Preservatives	350	

^a Conversion factor: one pound VOC per gallon (U.S.) = 119.82 grams VOC per liter.

^b Units are grams of VOC per liter (pounds of VOC per gallon) of coating, including water and exempt compounds.

PROPOSED SUGGESTED CONTROL MEASURE (2/11/00)
COMPARED TO 6/10/99 VERSION IN NOP/IS

**California Air Resources Board (ARB)
Suggested Control Measure for Architectural Coatings**

RULE ____ ARCHITECTURAL COATINGS

1. APPLICABILITY

- 1.1 Except as provided in subsection 1.2, ~~the provisions of this rule are~~ is applicable to any person who supplies, sells, offers for sale, ~~applies, or solicits the application of any architectural coating, or who or~~ manufactures any architectural coating for use within the District, as well as any person who applies or solicits the application of any architectural coating within the District.
- 1.2 ~~The provisions of this~~ This rule ~~do~~ does not apply to ~~any architectural coating described in subsections 1.2.1 through 1.2.3:~~
- 1.2.1 ~~Any Architectural~~ Any architectural coating that is manufactured for use outside of the District or for shipment to other manufacturers for reformulation or repackaging.
- 1.2.2 ~~A coating that is an~~ Any aerosol coating product.
- 1.2.3 ~~Any Architectural~~ Any architectural coating that is sold in a container with a volume of one liter (1.057 quart) or less.

2. DEFINITIONS

- 2.0 Adhesive: Any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.
- 2.1 Aerosol Coating Product: A pressurized ~~spray system~~ coating product containing pigments or resins that dispenses product ingredients by means of a propellant ~~or mechanically induced force,~~ and is packaged in a disposable can for hand-held application, or for use in specialized equipment for ground traffic/marketing applications. ~~“Aerosol Product” does not include pump sprays~~
- 2.2 Antenna Coating: A coating labeled as and formulated exclusively for application to equipment and associated structural appurtenances that are used to receive or transmit electromagnetic signals.

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- 2.3 Antifouling Coating: A coating labeled as and formulated for application to submerged stationary structures and their appurtenances to prevent or reduce the attachment of marine or freshwater biological organisms. To qualify as an antifouling coating, the coating must be registered with both the U.S. EPA under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Section 136, *et seq.*) and with the California Department of Pesticide Regulation.
- 2.2 2.4 Appurtenance: Any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lampposts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.
- 2.3 2.5 Architectural Coating: A coating ~~recommended for application to be applied to~~ stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purposes of this rule.
- ~~2.4 Bituminous Coating: A coating formulated and recommended for roofing, pavement sealing, or waterproofing that incorporates bitumens.~~
- 2.6 Bitumens are black: Black or brown materials including, but not limited to, asphalt, tar, pitch, and asphaltite that are soluble in carbon disulfide, consist mainly of hydrocarbons, and are obtained from natural deposits or as residues from the distillation of crude petroleum or coal.
- 2.7 Bituminous Roof Coating: A coating labeled as and formulated for roofing that incorporates bitumens.
- 2.5 2.8 Bond Breaker: A coating labeled as and formulated ~~and recommended~~ for application between layers of concrete to prevent a freshly poured top layer of concrete from bonding to the layer over which it is poured.
- 2.9 Clear Brushing Lacquers: Clear wood finishes, excluding clear lacquer sanding sealers, formulated with nitrocellulose or synthetic resins to dry by solvent evaporation without chemical reaction and to provide a solid, protective film, which are intended exclusively for application by brush, and which are labeled as specified in subsection 4.1.5.
- 2.6 2.10 Clear Wood Coatings: Clear and semi-transparent coatings, including lacquers and varnishes, applied to wood substrates to provide a transparent or translucent

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solid film.

- ~~2.7~~ 2.11 Coating: A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealers, and stains.
- ~~2.8~~ 2.12 Colorant: A concentrated pigment dispersion in water, solvent, and/or binder that is added to an architectural coating after packaging in a paint store or at the site of application-sale units to produce the desired color.
- ~~2.9~~ 2.13 Concrete Curing Compound: A coating ~~formulated~~ labeled as and ~~recommended~~ formulated for application to freshly poured concrete to retard the evaporation of water.
- ~~2.10~~ 2.14 Dry Fog Coating: A coating ~~formulated~~ labeled as and ~~formulated~~ recommended only for spray application such that overspray droplets dry before subsequent contact with incidental surfaces in the vicinity of the surface coating activity.
- ~~2.11~~ 2.15 ~~Exempt Solvent Compound~~: A compound identified as exempt under the definition of Volatile Organic ~~Compounds~~ Compound (VOC), subsection 2.432.57. Exempt compounds content of a coating shall be determined by U.S. EPA Method 24 or South Coast Air Quality Management District (SCAQMD) Method 303-91 (Revised February 1993), incorporated by reference in subsection 6.5.10.
- 2.16 Faux Finishing Coating: A coating labeled and formulated as a stain or glaze to create artistic effects including, but not limited to, dirt, old age, smoke damage, and simulated marble and wood grain.
- 2.17 Fire-Resistive Coating: An opaque coating labeled as and formulated to protect the structural integrity by increasing the fire endurance of interior or exterior steel and other structural materials, that has been fire tested and rated by a testing agency approved by building code officials for use in bringing assemblies of structural materials into compliance with federal, state, and local building code requirements. The fire-resistive coating and the testing agency must be approved by building code officials. The fire-resistant coating shall be tested in accordance with ASTM Designation E 119-98, incorporated by reference in subsection 6.5.2.
- ~~2.12~~ 2.18 Fire-Retardant Coating: A coating ~~formulated and recommended~~ labeled as and formulated to retard ignition and to have a flame spread, index of less than 25 when tested in accordance with American Society for Testing and Materials (ASTM) Designation E-84-87, "Standard Test Method for Surface Burning Characteristics of Building Material," after application to Douglas fir according

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~~to the manufacturer's recommendations (incorporated by reference--see section 5); that has been fire tested and rated by a testing agency approved by building code officials for use in bringing building and construction materials into compliance with federal, state and local building code requirements. The fire-retardant coating and the testing agency must be approved by building code officials. The fire-retardant coating shall be tested in accordance with ASTM Designation E 84-99, incorporated by reference in subsection 6.5.1.~~

~~2.13~~ 2.19 Flat Coating: A coating that is not defined under any other definition in this rule and that registers gloss less than 15 on an 85-degree meter or less than 5 on a 60-degree meter according to ASTM Designation D 523-89 (1999), incorporated by reference in subsection 6.5.3., Standard Test Method for Specular Gloss ~~(incorporated by reference--see section 5-).~~

~~2.14~~ 2.20 Floor Coating: An opaque coating that is labeled as and formulated and recommended for application to flooring including, but not limited to, decks, porches, and steps, and other horizontal surfaces which may be subject to foot traffic, for the purposes of abrasion resistance.

2.21 Flow Coating: A coating that used by electric power companies or their subcontractors exclusively to maintain the protective coating systems present on utility transformer units.

~~2.15~~ 2.22 Form-Release Compound: A coating ~~formulated~~ labeled as and recommended formulated for application to a concrete form to prevent the freshly poured concrete from bonding to the form. The form may consist of wood, metal, or some material other than concrete.

~~2.16~~ 2.23 Graphic Arts Coating or Sign Paint: A coating labeled as and formulated and recommended for hand-application by artists using brush or roller techniques to indoor and outdoor signs (excluding structural components) and murals including lettering enamels, poster colors, copy blockers, and bulletin enamels.

~~2.17~~ 2.24 High-Temperature Coating: A high performance coating ~~formulated, recommended, labeled as and used~~ formulated for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).

~~2.18~~ 2.25 Industrial Maintenance Coating: A high performance architectural coating, excluding floor coatings but including primers, sealers, undercoaters, intermediate coats, and topcoats, formulated ~~and recommended~~ for application to substrates exposed to one or more of the following extreme environmental conditions listed in subsections ~~2.18.1~~ 2.25.1 through ~~2.18.5 in an industrial~~ 2.25.5, commercial, or institutional setting and labeled as specified in subsection 4.1.4:

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- ~~2.18.12.25.1~~ Immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
- ~~2.18.22.25.2~~ Acute or chronic exposure to corrosive, caustic or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
- ~~2.18.32.25.3~~ Repeated exposure to temperatures above 121°C (250°F);
- ~~2.18.42.25.4~~ Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleansers, or scouring agents; or
- ~~2.18.52.25.5~~ Exterior exposure of metal structures and structural components.
- 2.19 2.26 Lacquer: A clear or opaque wood coating, including clear lacquer sanding sealers, formulated with cellulosic or synthetic resins to dry by evaporation without chemical reaction and to provide a solid, protective film. Lacquer stains are considered stains, not lacquers.
- 2.20 2.27 Low Solids Coating: A coating containing 0.12 kilogram or less of solids per liter (1 pound or less of solids per gallon) of coating material ~~and for which at least half of the volatile component is water.~~
- 2.21 2.28 Magnesite Cement Coating: A coating ~~formulated~~ labeled as and recommended formulated for application to magnesite cement decking to protect the magnesite cement substrate from erosion by water.
- 2.22 2.29 Mastic Texture Coating: A coating labeled as and formulated ~~and recommended~~ to cover holes and minor cracks and to conceal surface irregularities, and is applied in a single coat of at least 10 mils (0.010 inch) dry film thickness.
- 2.23 2.30 Metallic Pigmented Coating: A coating containing at least 48 grams of elemental metallic pigment per liter of coating as applied (0.4 pounds per gallon), ~~excluding zinc when tested in accordance with SCAQMD Method 318-95, incorporated by reference in subsection 6.5.4.~~
- 2.24 2.31 Multi-Color Coating: A coating that is packaged in a single container and that exhibits more than one color when applied in a single coat.
- 2.25 2.32 Nonflat Coating: A coating that is not defined under any other definition in this rule and that registers a gloss of 15 or greater on an 85-degree meter and ~~or~~ 5 or greater on a 60-degree meter according to ASTM Designation D 523-89, ~~(1999), incorporated by reference in subsection 6.5.3. Standard Test Method for Specular Gloss (incorporated by reference--see section 5.).~~

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- ~~2.26~~ 2.33 Post-Consumer Coating: A finished coating that would have been disposed of as a solid waste, having completed its usefulness to a consumer, and does not include manufacturing wastes.
- ~~2.27~~ 2.34 Pre-Treatment Wash Primer: A primer that contains a minimum of 0.5 percent acid, by weight, when tested in accordance with ASTM Designation D 1613-96, incorporated by reference in subsection 6.5.5, that is labeled as and formulated and recommended for application directly to bare metal surfaces to provide corrosion resistance and to promote adhesion of subsequent topcoats.
- ~~2.28~~ 2.35 Primer: A coating labeled as and formulated and recommended for application to a substrate to provide a firm bond between the substrate and subsequent coats.
- ~~2.28~~ 2.36 Quick-Dry Enamel: A nonflat coating that is labeled as and formulated that has to have the following characteristics:
- ~~2.28.1~~ 2.36.1 Is capable of being applied directly from the container under normal conditions with ambient temperatures between 16 and 27°C (60 and 80°F);
- ~~2.28.2~~ 2.36.2 When tested in accordance with ASTM Designation D 1640-83 95, (Reapproved 1989), Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature (incorporated by reference--see section 5-); incorporated by reference in subsection 6.5.6, sets to touch in 2 hours or less, is tack free in 4 hours or less, and dries hard in 8 hours or less by the mechanical test method; and
- ~~2.28.3~~ 2.36.3 Has a dried film gloss of 70 or above on a 60 degree meter.
- 2.37 Quick-Dry Primer, Sealer, and Undercoater: A primer, sealer, or undercoater that is dry to the touch in 30 minutes and can be recoated in 2 hours when tested in accordance with ASTM Designation D 1640- 95, incorporated by reference in subsection 6.5.6.
- 2.38 Recycled Coating: An architectural coating formulated such that not less than 50 percent of the total weight consists of secondary and post-consumer coating, with not less than 10 percent of the total weight consisting of post-consumer coating.
- ~~2.29~~ 2.39 Residential Use Residence: Use in a Areas where people reside or lodge including, but not limited to single and multiple family dwellings, condominiums, mobile homes, apartment complexes, motels, and hotels.
- ~~2.30~~ 2.40 Roof Coating: A non-bituminous coating labeled as and formulated and recommended for application to exterior roofs for the primary purpose of preventing penetration of the substrate by water or reflecting heat and reflecting

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ultraviolet radiation. Metallic pigmented roof coatings which qualify as metallic pigmented coatings shall not be considered to be in this category, but shall be considered to be in the metallic pigmented coatings category.

- ~~2.31~~ 2.41 Rust Preventative Coating: A coating formulated ~~and recommended~~ exclusively for use in ~~preventing or on a residence to prevent~~ the corrosion of ferrous-metal surfaces ~~and labeled as in residential situations~~ subsection 4.1.6.
- ~~2.32~~ 2.42 Sanding Sealer: A clear wood ~~coating~~ sealer labeled as ~~and~~ formulated ~~and recommended~~ for application to bare wood to seal the wood and to provide a coat that can be sanded to create a smooth surface for subsequent applications of coatings. A sanding sealer that also meets the definition of a lacquer is not included in this category, but is included in the lacquer category.
- ~~2.33~~ 2.43 Sealer: A coating ~~formulated~~ labeled as and ~~recommended~~ formulated for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate; or to prevent harm to subsequent coatings by materials in the substrate; ~~to block stains, odors, or efflorescence; to seal fire, smoke, or water damage; or to condition chalky surfaces.~~
- 2.44 Secondary Coating: A fragment of a finished coating or a finished coating from a manufacturing process that has converted resources into a commodity of real economic value, but does not include excess virgin resources of the manufacturing process.
- ~~2.34~~ 2.45 Shellac: A clear or opaque coating formulated ~~with natural resins (except nitrocellulose resins) soluble in alcohol (including, but not limited to, solely with the resinous secretions of the lac beetle; (*Laciffer lacca*);~~ thinned with alcohol, and formulated to Shellacs dry by evaporation without a chemical reaction, ~~and provide a quick-drying, solid protective film that may be used for blocking stains.~~
- ~~2.35~~ Solicit: ~~To require for use or specify, by written oral contract.~~
- ~~2.36~~ 2.46 Shop Application: ~~Application of a~~ A coating is applied to a product or a component of a product in or on the premises of a factory or a shop as part of a manufacturing, production, or repairing process (e.g., original equipment manufacturing coatings).
- 2.47 Solicit: To require for use or to specify, by written or oral contract.
- 2.48 Specialty Primer: A coating labeled as specified in subsection 4.1.7 and that is formulated for application to a substrate to seal fire, smoke or water damage; to

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condition excessively chalky surfaces, or to block stains. An excessively chalky surface is one that is defined as having chalk rating of four or less as determined by ASTM Designation D 4214-98, incorporated by reference in subsection 6.5.7.

- ~~2.37~~ 2.49 Stain: A wood coating labeled as and formulated to change the color of a surface but not conceal the grain pattern or texture, including surface. This includes lacquer stains.
- ~~2.38~~ 2.50 Swimming Pool Coating: A coating labeled as and formulated and recommended to coat the interior of swimming pools and to resist swimming pool chemicals.
- 2.51 Swimming Pool Repair and Maintenance Coating: A rubber based coating labeled as and used over existing rubber based coatings for the repair and maintenance of swimming pools.
- 2.52 Temperature-Indicator Safety Coating: A coating labeled and formulated as a color-changing indicator coating for the purpose of monitoring the temperature and safety of the substrate, underlying piping, or underlying equipment, and for application to substrates exposed continuously or intermittently to temperatures above 204°C (400°F).
- ~~2.39~~ 2.53 Tint Base: A An architectural coating to which colorant is added in a paint store or at the site of application after packaging in sale units to produce a desired color.
- ~~2.40~~ 2.54 Traffic Marking Coating: A coating labeled as and formulated and recommended for marking and striping streets, highways, or other traffic surfaces including, but not limited to, curbs, berms, driveways, parking lots, sidewalks, and airport runways.
- ~~2.41~~ 2.55 Undercoater: A coating labeled as and formulated and recommended to provide a smooth surface for subsequent coatings.
- ~~2.42~~ 2.56 Varnish: A clear or semi-transparent wood coating, excluding lacquers and shellacs, formulated and recommended to provide a durable, solid, protective film dry by chemical reaction on exposure to air. Varnishes may contain small amounts of pigment to color a surface, or to control the final sheen or gloss of the finish.
- ~~2.43~~ 2.57 Volatile Organic Compound (VOC): Any volatile compound of carbon, which may be emitted to the atmosphere during the application of and or subsequent drying or curing of coatings subject to this rule containing at least one atom of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, and excluding the following:

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- ~~2.43.1~~ 2.57.1 methane;
methylene chloride (dichloromethane);
1,1,1-trichloroethane (methyl chloroform);
trichlorofluoromethane (CFC-11);
dichlorodifluoromethane (CFC-12);
1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113);
1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114);
chloropentafluoroethane (CFC-115);
chlorodifluoromethane (HCFC-22);
1,1,1-trifluoro-2,2-dichloroethane (HCFC-123);
2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124);
1,1-dichloro-1-fluoroethane (HCFC-141b);
1-chloro-1,1-difluoroethane (HCFC-142b);
trifluoromethane (HFC-23);
pentafluoroethane (HFC-125);
1,1,2,2-tetrafluoroethane (HFC-134);
1,1,1,2-tetrafluoroethane (HFC-134a);
1,1,1-trifluoroethane (HFC-143a);
1,1-difluoroethane (HFC-152a);
cyclic, branched, or linear completely methylated siloxanes;
the following classes of perfluorocarbons:
(A) cyclic, branched, or linear, completely fluorinated
alkanes;
(B) cyclic, branched, or linear, completely fluorinated ethers
with no unsaturations;
(C) cyclic, branched, or linear, completely fluorinated
tertiary amines with no unsaturations; and
(D) sulfur-containing perfluorocarbons with no
unsaturations and with the sulfur bonds only to carbon and
fluorine; and
~~2.43.2~~ 2.57.2 the following low-reactive organic compounds which have been
exempted by the U.S. EPA:
acetone;
ethane; ~~and~~
parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl
benzene);
perchloroethylene; and
methyl acetate.

~~2.44~~ 2.58 VOC Content: The weight of VOC per volume of coating, calculated according
to the procedures specified in subsection ~~5.16.1~~.

~~2.45~~ 2.59 Waterproofing ~~Wood~~ Sealer: A coating labeled as and formulated ~~and~~
~~recommended~~ for application to a ~~wood~~ porous substrate for the primary purpose
of preventing the penetration of water.

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- ~~2.46~~ ~~Waterproofing Concrete/Masonry Sealer: A clear or pigmented coating that is formulated for sealing concrete and masonry to provide resistance against water, alkalis, acids, ultraviolet light, and staining.~~
- 2.47 2.60 Wood Preservative: A coating labeled as and formulated ~~and recommended~~ to protect exposed wood from decay or insect attack, ~~and which contains a wood preservative chemical~~ that is registered with both the ~~United States Environmental Protection Agency (U.S. EPA)~~ under the Federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code (U.S.C.) Section 136, *et seq.*) and ~~that is registered~~ with the California Department of Pesticide Regulation.

3. STANDARDS

- 3.1 **VOC Content Limits:** Except as provided in subsections 3.2 and 3.3, no person shall, within the District, manufacture, blend, or repackage for sale within the district, supply, offer for sale, sell, apply, or solicit the application of any architectural coating ~~listed in Table 1 which contains VOC (less water and exempt solvents, and excluding any colorant added to tint bases)~~ with a VOC content in excess of the corresponding limit specified in ~~the~~ Table 1, after the corresponding date specified, or manufacture, blend, or repackage such a coating for use within the District after the specified effective date in Table 1.
- 3.2 **Most Restrictive VOC Limit:** If anywhere on container of any architectural coating, or any label or sticker affixed to the container, or in any sales, advertising, or technical literature supplied by a manufacturer or anyone acting on their behalf, any representation is made that indicates that the coating meets the definition of or is recommended for use for more than one of the coating categories listed in Table 1, then the most restrictive VOC content limit shall apply. This provision does not apply to subsections 3.2.1 through 3.2.13. ~~3.2.6.~~

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- 3.2.1 ~~Lacquer coatings (including lacquer sanding sealers are subject only to the VOC content limit in Table 1 for lacquers but excluding lacquer stains).~~
- 3.2.2 ~~Metallic pigmented coatings that meet the definition of or are recommended for use as roof coatings, industrial maintenance coatings, or primers are subject only to the VOC content limit in Table 1 for metallic pigmented coatings.~~
- 3.2.3 ~~Shellacs that meet the definition of or are recommended for use as any other architectural coating are subject only to the VOC content limit in Table 1 for shellacs.~~
- 3.2.4 ~~Fire-retardant coatings.~~
- ~~3.2.4~~ 3.2.5 ~~Pre-treatment wash primers that also meet the definition of or are recommended for use as primers or that meet the definition for industrial maintenance coatings are subject only to the VOC content limit in Table 1 for pre-treatment wash primers.~~
- ~~3.2.5~~ 3.2.6 ~~Industrial maintenance coatings that also meet the definition of or are recommended for use as primers, sealers, undercoaters, or mastic texture coatings are subject only to the VOC content limit in Table 1 for industrial maintenance coatings.~~
- 3.2.7 ~~Low-solids coatings.~~
- ~~3.2.8~~ 3.2.8 ~~Wood preservatives.~~
- ~~3.2.6~~ 3.2.9 ~~High temperature coatings, that meet the definition of or are recommended for use as industrial maintenance coatings are subject only to the VOC content limit in Table 1 for high temperature coatings.~~
- 3.2.10 ~~Temperature-Indicator Safety Coatings.~~
- 3.2.11 ~~Antenna Coatings.~~
- ~~3.2.12~~ 3.2.12 ~~Antifouling Coatings.~~
- ~~3.2.13~~ 3.2.13 ~~Flow Coatings.~~
- 3.3 ~~**Sell-Through of Coatings Provision:** Sale of a~~ A coating manufactured prior to the effective date of the corresponding standard specified for that coating in Table 1, and not complying with that standard, shall not constitute a violation of

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~~subsection 3.1 until~~ may be sold, supplied, or offered for sale for up to three years after the specified effective date of the standard, nor shall application of such a coating. This subsection does not apply to any coating that does not display the date or date-code required by subsection 4.1.1.

- 3.4 **Painting Practices:** All architectural coating containers used to apply the contents therein to a surface ~~direct~~ directly from ~~said the~~ container by pouring, siphoning, brushing, rolling, padding, ragging or other means, shall be closed when not in use. These architectural coating containers include, but ~~should~~ are not ~~be~~ limited to, drums, buckets, cans, pails, trays or other application containers. Containers of any VOC-containing materials used for thinning and cleanup shall also be closed when not in use. "Not in use" includes, but is not limited to, any interruption, delay, completion of transfer of ~~said the~~ contents, or termination of ~~said the~~ application.
- 3.5 **Thinning:** ~~Any person who applies or solicits the application of any architectural coating within the District shall follow the manufacturer's recommendation regarding thinning of the coating under normal environmental and application conditions as described in subsection 4.1.2. This recommendation requirement shall not apply to the thinning of architectural coatings with water.~~ No person who applies or solicits the application of any architectural coating shall apply a coating that is thinned to exceed the applicable VOC limit specified in Table 1.
- 3.6 **Industrial Maintenance Coatings:** Any person who applies or solicits the application of any architectural coating within the District shall follow the manufacturer's recommendation regarding the application of industrial maintenance coatings as described in subsection ~~4.1.5~~ 4.1.4. Effective January 1, 2004, no ~~No~~ person who applies or solicits the application of any architectural coating shall apply an industrial maintenance coating in or on a residence as defined in subsection ~~2.29-2.39~~ or in or on areas of industrial, commercial, or institutional facilities not exposed to the extreme environmental conditions identified in subsection ~~2.18-2.25~~, such as office space and meeting rooms.
- ~~3.7~~ **Rust Preventative Coatings:** Effective January 1, 2004, no person shall apply or solicit the application of any rust preventative coating for industrial use.
- ~~3.7~~ 3.8 **Coatings Not Listed in Table 1:** For any coating that ~~cannot be classified as a category~~ does not meet any of the definitions for the specialty coatings categories listed in Table 1, the VOC content limit shall be determined by classifying the coating as a flat coating or a nonflat coating, based on its gloss, as defined in subsections ~~2.13-2.19~~ and ~~2.25~~ 2.32, and the corresponding flat or nonflat VOC limit shall apply.

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4. CONTAINER LABELING REQUIREMENTS

4.1 Each manufacturer of any architectural coating subject to ~~the provisions of this subsection rule~~ shall ~~provide~~ display the information listed in subsections 4.1.1 through ~~4.1.5~~ 4.1.7 on the coating container or label in which the coating is sold or distributed.

4.1.1 **Date Code:** The date the coating was manufactured, or a date code representing the date, shall be indicated on the label, lid, or bottom of the container. ~~Each If the manufacturer of such coatings uses a date code for any coating, the manufacturer shall file with the Air Pollution Control Officer and the Executive Officer of the California Air Resources Board (ARB), an explanation of each code with the Executive Officer of the ARB.~~

4.1.2 **Thinning Recommendations:** A statement of the manufacturer's recommendation regarding thinning of the coating shall be indicated on the label or lid of the container. This requirement does not apply to the thinning of architectural coatings with water. If thinning of the coating prior to use is not necessary, the recommendation must specify that the coating is to be applied without thinning.

4.1.3 **VOC Content:** Each container of any coating subject to this rule shall display either the maximum or the actual VOC content of the coating, as ~~applied supplied, and after any~~ including the maximum thinning as recommended by the manufacturer. VOC content shall be displayed in grams of VOC per liter of coating ~~(less water and exempt solvent, and excluding any colorant added to tint bases)~~. VOC content displayed shall be calculated using product formulation data, or shall be determined using the test methods in subsection ~~5.2~~ 6.2. The equations in subsection ~~5.1~~ 6.1 shall be used to calculate VOC content.

~~4.1.4~~ **Coating Category Designation:** ~~Each container of any coating subject to this rule shall display on the label or lid of the container the applicable coating category with which the coating is required to comply, as listed in Table 1. Alternatively, this information shall be displayed on a product data sheet for the coating.~~

~~4.1.5~~ 4.1.4 **Industrial Maintenance Coatings:** In addition to the information specified in subsection 4.1.1, 4.1.2, and 4.1.3, each manufacturer of any industrial maintenance coating subject to ~~the provisions of this subsection rule~~ shall display on the label or lid of the container in which the coating is sold or distributed one or more of the descriptions listed in subsections ~~4.1.5.1~~ 4.1.4.1 through ~~4.1.5.4~~ 4.1.4.4.

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- ~~4.1.5.1~~ 4.1.4.1 “For industrial use only.”
- ~~4.1.5.2~~ 4.1.4.2 “For professional use only.”
- ~~4.1.5.3~~ 4.1.4.3 “Not for residential use” or “Not intended for residential use.”
- ~~4.1.5.4~~ 4.1.4.4 “This coating is intended for use under the following condition(s):” (Include each condition in subsections 4.1.5.4.1 through 4.1.5.4.5 that applies to the coating.)
 - ~~4.1.5.4.1~~ 4.1.4.4.1 Immersion in water, wastewater, or chemical solutions (aqueous and nonaqueous solutions), or chronic exposure of interior surfaces to moisture condensation;
 - ~~4.1.5.4.2~~ 4.1.4.4.2 Acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions;
 - ~~4.1.5.4.3~~ 4.1.4.4.3 Repeated exposure to temperatures above 121°C (250°F);
 - ~~4.1.5.4.4~~ 4.1.4.4.4 Repeated (frequent) heavy abrasion, including mechanical wear and repeated (frequent) scrubbing with industrial solvents, cleaners, or scouring agents; or
 - ~~4.1.5.4.5~~ 4.1.4.4.5 Exterior exposure of metal structures and structural components.

4.1.5 **Clear Brushing Lacquers:** Effective January 1, 2003, each container of this category shall display explicit label instructions that the product is formulated for brush application only, and that thinning and/or spraying is not permitted.

4.1.6 **Rust Preventative Coatings:** Effective January 1, 2003, the labels of rust preventative coatings shall include the statement “For Metal Substrates Only” prominently displayed.

4.1.7 **Specialty Primers:** Effective January 1, 2003, the labels of all specialty primers shall prominently display one or more of the descriptions listed in subsection 4.1.7.1 through 4.1.7.5.

- 4.1.7.1 “For blocking stains only.”
- 4.1.7.2 “For fire-damaged substrates only.”
- 4.1.7.3 “For smoke-damaged substrates only.”
- 4.1.7.4 “For water-damaged substrates only.”
- 4.1.7.5 “For excessively chalky substrates only.”

5. REPORTING REQUIREMENTS

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- 5.1 **Clear Brushing Lacquers:** Each manufacturer of clear brushing lacquers shall, on or before April 1 of each calendar year, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of clear brushing lacquers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.
- 5.2 **Rust Preventative Coatings:** Each manufacturer of rust preventative coatings shall, on or before April 1 of each calendar year, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of rust preventative coatings sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.
- 5.3 **Specialty Primers:** Each manufacturer of specialty primers shall, on or before April 1 of each calendar year, submit an annual report to the Executive Officer of the ARB. The report shall specify the number of gallons of specialty primers sold in the State during the preceding calendar year, and shall describe the method used by the manufacturer to calculate State sales.
- 5.4 **Toxic Exempt Compounds:** For each architectural coating that contains perchloroethylene or methylene chloride, the manufacturer shall, on or before April 1 of each calendar year, report to the Executive Officer of the ARB the following information for products sold in the State during the preceding year:
- 5.4.1 the product brand name and a copy of the product label with legible usage instructions;
- 5.4.2 the product category listed in Table 1 to which the coating belongs;
- 5.4.3 the total sales in California during the calendar year to the nearest gallon;
- 5.4.4 the volume percent, to the nearest 0.10 percent, of perchloroethylene and methylene chloride in the coating.
- 5.5 **Recycled Coatings:** Manufacturers of recycled coatings must submit a letter to the Executive Officer of the Air Resources Board certifying their status as a Recycled Paint Manufacturer. The manufacturer shall, on or before April 1 of each calendar year, submit an annual report to the Executive Officer of the ARB. The report shall include, for all recycled coatings, the total number of gallons distributed in California during the preceding year.

56. COMPLIANCE PROVISIONS AND TEST METHODS

- ~~5.1~~ 6.1 **Calculation of VOC Content:** For the purpose of determining compliance with the VOC content limits in Table 1, the VOC content of a coating shall be determined by using the procedures described in subsection ~~5.1.1~~ 6.1.1 or ~~5.1.2~~ 6.1.2, as appropriate. The VOC content of a tint base shall be determined without colorant that is added after the tint base is manufactured.

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- ~~5.1.1~~ 6.1.1 With the exception of low solids coatings, determine the VOC content in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water and exempt compounds. ~~Calculate~~ Determine the VOC content using equation 1 as follows:

$$\text{VOC Content} = \frac{(W_s - W_w - W_{ec})}{(V_m - V_w - V_{ec})} \quad (1)$$

Where:

VOC content = grams of VOC per liter of coating
 W_s = weight of volatiles, in grams
 W_w = weight of water, in grams
 W_{ec} = weight of exempt compounds, in grams
 V_m = volume of coating, in liters
 V_w = volume of water, in liters
 V_{ec} = volume of exempt compounds, in liters

- ~~5.1.2~~ 6.1.2 For low solids coatings, determine the VOC content in units of grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, including the volume of any water and exempt compounds. ~~Calculate~~ Determine the VOC content using equation 2 as follows:

$$\text{VOC Content}_{ls} = \frac{(W_s - W_w - W_{ec})}{(V_m)} \quad (2)$$

Where:

VOC content_{ls} = the VOC content of a low solids coating in grams of VOC per liter of coating
 W_s = weight of volatiles, in grams
 W_w = weight of water, in grams
 W_{ec} = weight of exempt compounds, in grams
 V_m = volume of coating, in liters

- ~~5.2~~ 6.2 **VOC Content of Coatings:** To determine the ~~composition~~ physical properties of a coating in order to perform the calculations in subsection ~~5.1.6.1~~, the reference method for VOC content is U.S. EPA Method 24, of Appendix A of 40 Code of Federal Regulations (CFR) Part 60, Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, incorporated by reference in subsection 6.5.11, except as provided in subsections ~~5.3, 5.4, and 5.5~~ 6.3 and 6.4. An alternative method to determine the

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VOC content of coatings is ~~South Coast Air Quality Management District (SCAQMD) Method 304~~ 304-91 (Revised February 1996), incorporated by reference in subsection ~~5.5.10~~ 6.5.12. The exempt compounds content shall be determined by SCAQMD Method ~~303~~ 303-91 (Revised August 1996), incorporated by reference in subsection ~~5.5.9~~ 6.5.10. To determine the VOC content of a coating, the manufacturer may use U.S. EPA Method 24 of Appendix A of 40 CFR part 60, or an alternative method as provided in subsection ~~5.3~~ 6.3, formulation data, or any other reasonable means for predicting that the coating has been formulated as intended (e.g., quality assurance checks, recordkeeping). However, if there are any inconsistencies between the results of a Method 24 test and any other means for determining VOC content, the Method 24 test results will govern, except when an alternative method is approved by the ARB and the U.S. EPA as an alternative to Method 24 as specified in subsection 6.3. The District Air Pollution Control Officer (APCO) may require the manufacturer to conduct a Method 24 analysis.

~~5.3~~ 6.3 **Alternative Test Methods:** Other test methods demonstrated to provide results that are acceptable for purposes of determining compliance with subsection ~~5.2~~ 6.2, after review and approved in writing by the staffs of the District, the ARB, and the U.S. EPA, ~~and approved in writing by the District APCO~~, may also be used.

~~5.4~~ 6.4 **Methacrylate Traffic Marking Coatings:** Analysis of methacrylate multicomponent coatings used as traffic marking coatings shall be conducted according to ~~the procedures specified in 40 CFR part 59, subpart D, appendix A, Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings~~ a modification of U.S. EPA Method 24 (40 CFR 59, subpart D, Appendix A), incorporated by reference in subsection 6.5.13. This method ~~is a modification of EPA Method 24 of appendix A of (40 CFR part 60, and it has not been approved for methacrylate multicomponent coatings used for other purposes than as traffic marking coatings or for other classes of multicomponent coatings.~~

~~5.5~~ **Methods Incorporated by Reference:** ~~The materials listed in this subsection are incorporated by reference in the subsections noted.~~

6.5 **Test Methods:** For coatings subject to the provisions of this rule, the following test methods shall be used:

~~5.5.1~~ 6.5.1 **Flame Spread Index:** ~~American Society for Testing and Materials (The flame spread index of a fire-retardant coating shall be determined by ASTM) Designation E 84-91A~~ 84-99, Standard "Standard Test Method for Surface Burning Characteristics of Building Material Materials," incorporation incorporated by reference approved for in section 2., Fire

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Retardant, Fire-Retardant Coating.

- 6.5.2 **Fire Resistance Rating:** The fire resistance rating of a fire-resistive coating shall be determined by ASTM Designation E 119-98, "Standard Test Methods for Fire Tests of Building Construction Materials," incorporated by reference in section 2, Fire-Resistive Coating.
- 5.5.2 6.5.3 **Gloss Determination:** The gloss of a coating shall be determined by ASTM Designation D 523-89; (1999) "Standard Test Method for Specular Gloss," incorporation incorporated by reference in section 2., Flat Coating, Nonflat Coating, and Quick-Dry Enamel.
- 5.5.3 ~~**Low Solids Coatings:** Bay Area Air Quality Management District (BAAQMD) Method 31, Determination of Volatile Organic Compounds in Paint Strippers, Solvent Cleaners, and Low Solids Coatings; BAAQMD Manual of Procedures, Volume III, amended 4/15/92; incorporation by reference approved for section 2, Low Solids Coating.~~
- 5.5.4 6.5.4 **Metal Content of Coatings:** The metallic content of a coating shall Metal in Metallic be determined by SCAQMD Method 311-91, Determination of Percent Metal in Metallic Coatings by Spectrographic Method, incorporation by reference approved for SCAQMD Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," incorporated by reference in section 2, Metallic Pigmented Coating.
- 5.5.5 6.5.5 **Acid Content of Coatings:** The acid content of a coating shall be determined by ASTM Designation D1613-85; 1613-96, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products," incorporation incorporated by reference in section 2, Pre-treatment Wash Primer.
- 5.5.6 6.5.6 **Drying Times:** The set-to-touch, dry-hard, dry-to-touch, and dry-to-recoat times of a coating shall be determined by ASTM Designation D 1640-83 (Reapproved 1989) 1640- 95, Standard "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature," incorporation incorporated by reference approved for in section 2., Quick-Dry Enamel and Quick-Dry Primer, Sealer, and Undercoater. The tack-free time of a quick-dry enamel coating shall be determined by the Mechanical Test Method of ASTM Designation D 1640-95.
- 6.5.7 **Surface Chalkiness:** The chalkiness of a surface shall be determined

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using ASTM Designation D 4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films," incorporated by reference in section 2, Specialty Primer.

- 5.5.7 6.5.8 **Exempt Compounds--Siloxanes:** Exempt compounds that are cyclic, branched, or linear completely methylated siloxanes, shall be analyzed as exempt compounds for compliance with section 6 by BAAQMD Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials," BAAQMD Manual of Procedures, Volume III, adopted 11/6/96, incorporation incorporated by reference approved for in section 2., Volatile Organic Compound, and subsection 6.2
- 5.5.8 6.5.9 **Exempt Compounds--Parachlorobenzotrifluoride (PCBTF):** The exempt compound parachlorobenzotrifluoride shall be analyzed as an exempt compound for compliance with section 6 by BAAQMD Method 41, "Determination of Volatile Organic Compounds in Solvent Based Coatings and Related Materials," BAAQMD Manual of Procedures, Volume III, adopted 12/20/95, incorporation incorporated by reference approved for in section 2, Volatile Organic Compound, and subsection 6.2.
-
- 5.5.9 6.5.10 **Exempt Compounds:** Exempt compounds content under U.S. EPA Method 24 shall be analyzed by SCAQMD Method 303-91 (Revised 1993), "Determination of Exempt Compounds," SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," incorporation incorporated by reference approved for in section 2, Volatile Organic Compound, and subsection 5.2 6.2.
-
- 6.5.11 **VOC Content of Coatings:** The VOC content of a coating is determined by U.S. EPA Method 24 as it exists in appendix A of 40 Code of Federal Regulations (CFR) part 60, "Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings," 1998, incorporated by reference in subsection 6.2.
- 5.5.10 6.5.12 **Alternative VOC Content of Coatings:** The VOC content of coatings may be analyzed either by U.S. EPA Method 24 or SCAQMD Method 304-91 (Revised 1996), "Determination of Volatile Organic Compounds (VOC) in Various Materials," SCAQMD "Laboratory Methods of Analysis for Enforcement Samples," incorporation incorporated by reference approved for in subsection 5.2 6.2.
- 6.5.13 **Methacrylate Traffic Marking Coatings:** The VOC content of

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methacrylate multicomponent coatings used as traffic marking coatings shall be analyzed by the procedures in 40 CFR part 59, subpart D, appendix A, "Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings," (September 11, 1998), incorporated by reference in subsection 6.2.

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Table 1
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS

~~Limits are expressed in grams of VOC per liter^a of coating as applied, excluding the volume of any water, exempt compounds, or colorant added to tint bases.~~

Limits are expressed in grams of VOC per liter^a of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases. "Manufacturer's maximum recommendation" means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

Coating Category	Effective Dates					
	Current Limit	7/1/2001 Effective 1/1/2003	7/1/2002 Effective 1/1/2004	1/1/2005	7/1/2006	7/1/2008
Flat Coatings	250 ^b	100 ^c				50 ^c
Nonflat Coatings	250 ^b	150	150 ^c		50 ^c	
Specialty Coatings						
<u>Antenna Coatings</u>		530				
<u>Antifouling Coatings</u>		400				
Bituminous <u>Roof</u> Coatings	250 ^b	50 250				
Bond Breakers	350	350				
Clear Wood Coatings						
• <u>Clear Brushing Lacquers</u>		680				
• Lacquers (including lacquer sanding sealers)	680	550		275 ^c		
• Sanding Sealers (other than lacquer sanding sealers)	350	350				
• Varnishes	350	350				
Concrete Curing Compounds	350	350				
Dry Fog Coatings	400	400				
<u>Faux Finishing Coatings</u>		350				
<u>Fire Resistive Coatings</u>		350				
Fire-Retardant Coatings:		250				
• Clear	650	650				
• <u>Pigmented Opaque</u>	350	350				
Floor Coatings	400 ^d	100	100 ^c		50 ^c	

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Coating Category	Effective Dates					
	Current Limit	7/1/2001 Effective 1/1/2003	7/1/2002 Effective 1/1/2004	1/1/2005	7/1/2006	7/1/2008
<u>Flow Coatings</u>		<u>420</u>				
Form-Release Compounds	250	<u>250</u>				
Graphic Arts Coatings (Sign Paints)	500	150 <u>500</u>				
High Temperature Coatings	420	<u>420</u>				
Industrial Maintenance Coatings	340		250 ^c		100 ^c	
Low Solids Coatings ^b	120 ^d	120 ^e				
Magnesite Cement Coatings	450	<u>450</u>				
Mastic Texture Coatings	300	250 <u>300</u>				
Metallic Pigmented Coatings	500	<u>500</u>				
Multi-Color Coatings	420	250				
Pre-treatment Wash Primers	420	250 <u>420</u>				
Primers, Sealers, and Undercoaters	350	<u>200</u>	200 ^c		100 ^c	
Quick-Dry Enamels	400 ^f	<u>250</u>	250 ^c		50 ^c	
<u>Quick-Dry Primers, Sealers, and Undercoaters</u>		<u>200</u>				
<u>Recycled Coatings</u>		<u>250</u>				
Roof Coatings	250 ^d	50 <u>250</u>				
Rust Preventative Coatings	400 ^d	<u>400</u>	250 ^c		100 ^c	
Shellacs: • Clear • Opaque	730 550	650 <u>730</u> <u>550</u>				
<u>Specialty Primers</u>		<u>350</u>				
Stains: • Clear and semi-transparent • Opaque	350 350	<u>250</u>	250 ^c 150 ^c			
Swimming Pool Coatings	340	<u>340</u>				

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Coating Category	Effective Dates					
	Current Limit	7/1/2001 Effective 1/1/2003	7/1/2002 Effective 1/1/2004	1/1/2005	7/1/2006	7/1/2008
<u>Swimming Pool Repair and Maintenance Coatings</u>		<u>340</u>				
<u>Temperature-Indicator Safety Coatings</u>		<u>550</u>				
Traffic Marking Coatings	150 ^d	<u>150</u>				
Waterproofing Sealers: • Concrete • Wood	400	<u>250</u> 400 400	250 ^e			
Wood Preservatives	350	<u>350</u>				

^a — Conversion factor: one pound VOC per gallon (U.S.) = 119.82 grams VOC per liter.

^b — Units are grams of VOC per liter (pounds of VOC per gallon) of coating, including water and exempt compounds.

^b — Current SCM default limit.

^c — These limits are subject to revision based on the outcome of scheduled SCAQMD technology assessments.

^d — National rule limit as of September 18, 1999.

^e — Units are grams of VOC per liter (pounds of VOC per gallon) of coating, including water and exempt compounds.

^f — Most common current district limit.

Compliance Advisory

Reference Table for Determining Analogous National Rule^a and SCM^b Categories

<u>If your coating meets the National Rule^a definition below...</u>	<u>the following Suggested Control Measure^b category and VOC limit applies:</u>
Antenna coatings Anti-fouling coatings Anti-graffiti coatings Chalkboard resurfacers Extreme high durability coatings Flow coatings Heat reactive coatings Impacted immersion coatings Nonferrous ornamental metal lacquers and surface protectants Nuclear coatings Repair and maintenance thermoplastic coatings Thermoplastic rubber coatings and mastics	Industrial maintenance coatings
Calcimine Recoaters	Flat or Nonflat coatings (depending on gloss)
Concrete curing and sealing compounds Concrete surface retarders	Concrete curing compounds
Concrete protective coatings	Waterproofing sealers
Conversion varnishes Faux finishing/glazing	Varnishes
Quick-dry primers, sealers, and undercoaters coatings Stain controllers Sealers (including interior clear wood sealers)	Primers, sealers, and undercoaters
Low solids stains Low solids wood preservatives	Low solids coatings
Zone marking coatings	Traffic marking coatings

^a National Volatile Organic Compound Emission Standards for Architectural Coatings (40 CFR part 59, subpart D)

^b 1999 Air Resources Board Suggested Control Measure for Architectural Coatings